

DOROTHY D. SEARS, PhD

CONTACT

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Faculty website: <https://chs.asu.edu/dorothy-sears>

Adjunct, Non-Salaried Position:
UC San Diego, School of Medicine

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AKA - Dorothy Sears Worrall, PhD (1997-2004)

RESEARCH & PROFESSIONAL INTERESTS

My health promotion-related research focus is on obesity and risk for obesity-related diseases including insulin resistance, type 2 diabetes, cardiovascular disease, and cancer. My transdisciplinary approach incorporates dietary and behavioral intervention, systems biology, metabolomics, gut microbiome, epigenetics, gene expression profiling, and single gene analyses in humans and rodent models. My goals are to identify genes, biochemical pathways, dietary factors, and behaviors associated with obesity-related cancer and cardiometabolic disease risk, which can be used as novel targets for disease risk reduction and/or therapy. The breadth of my formal training and independent and team science research experience gives me a unique “genes-to-public health” scope for innovative hypothesis generation, study design and data interpretation. My most active areas of interest are currently centered on the health impact of sedentary behavior and sitting time in older adults, intermittent fasting, gene-gut microbiome-environment interaction, energy balance, and diet composition. I have strong leadership skills and experience but also enjoy and seek out research projects where I am part of a transdisciplinary team. My collaborations span multiple departments, Schools, and institutions across the globe. I have an internationally strong research reputation. I am passionate about mentoring trainees of all levels and supporting diversity in STEMM (Science, Technology, Engineering, Math, and Medicine). My teaching activities span the community level to the graduate and postgraduate levels in classroom and laboratory. I am actively engaged in community service, advocacy, and outreach related to my research and professional interests.

EDUCATION & UNIVERSITY APPOINTMENTS

Professor of Nutrition

College of Health Solutions, Arizona State University

Nov 2018-present

Adjunct Professor of Medicine (Non-salaried)

Division of Endocrinology and Metabolism, UCSD School of Medicine

2019-present

Adjunct Professor of Family Medicine & Public Health (Non-salaried)

Division of Preventive Medicine, UCSD School of Medicine

2019-present

Adjunct Professor of Medicine Division of Endocrinology and Metabolism, UCSD School of Medicine	2018-2019
Adjunct Professor of Family Medicine & Public Health Division of Preventive Medicine, UCSD School of Medicine	2018-2019
Associate Professor of Family Medicine & Public Health Division of Preventive Medicine, UCSD School of Medicine	2015-2018
Associate Professor of Medicine Division of Endocrinology and Metabolism, UCSD School of Medicine	2011-2018
Assistant Professor of Medicine Division of Endocrinology and Metabolism, UCSD School of Medicine	2003-2011
Assistant Project Scientist Division of Endocrinology and Metabolism, UCSD School of Medicine	2001-2003
Postgraduate research endocrinologist & post-doctoral fellow UCSD School of Medicine Mentor: Jerrold Olefsky, M.D., Division of Endocrinology and Metabolism	11/95 – 06/01
Postdoctoral fellow The Johns Hopkins University School of Medicine Mentor: Philip Hieter, Ph.D., Department of Molecular Biology & Genetics	06/94-07/95
Ph.D., The Johns Hopkins University School of Medicine Biochemistry, Cellular and Molecular Biology Program Thesis advisor: Philip Hieter, Ph.D., Department of Molecular Biology & Genetics	08/89-05/94
B.S., University of Southern California Major: Molecular Biology, Minor: Chemistry Research advisor: Norman Arnheim, Ph.D., Department of Biological Sciences & Biochemistry	08/84-05/88

AWARDS AND HONORS

President's Award - Association for Women in Science (AWIS), San Diego Chapter	2016
Greater San Diego Area American Diabetes Association ACT Advocacy Award	2015
State of California Certificate of Recognition for Outstanding Community Service	2014
UCSD Clinical and Translational Research Institute Catalyst Award	2013
P. Robert Majumder Charitable Foundation Awards (2 research awards)	2011
UCSD Clinical and Translational Research Institute Category 2 Seed Award	2011
Athena San Diego Pinnacle Award nominee for "Individual in Education" category	2011 & 2012
P. Robert Majumder Charitable Foundation Awards (2 research awards)	2010
University of California Health Sciences Academic Senate Grant	2010
Diabetes & Endocrinology Research Center Pilot & Feasibility Award	2007
University of California Health Sciences Academic Senate Grant	2004
K01 Career Development Award Recipient, NIH/NIDDK (3 years)	2002-05
Charles H. & Anna S. Stern Foundation Fellowship Award	2002
F32 Individual National Research Award Recipient, NIH/NIDDK (3 years)	1997-2000
The Johns Hopkins University School of Medicine Young Investigators Day Certificate of Merit	1994
USC Presidential Scholarship	1984-88
USC Dean's Scholarship	1984-88

UNIVERSITY AND PUBLIC ASSOCIATIONS AND SERVICE

University Committees, Initiatives & Leadership

ASU CHS Personnel Committee, Ad hoc Promotion & Tenure	2020
ASU CHS Exercise and Nutritional Sciences PhD Program Executive Committee	2020-present
ASU CHS Nutrition Faculty Search Committee, Chair	2019-2020
ASU CHS Vice Dean Search Committee	2019-2020

Arizona Wellbeing Commons – Co-Chair , Nutrition, Obesity, Exercise & Lifestyle Division Website: https://azwellbeingcommons.org/	2019-present
ASU Bioscience Institutional Review Board (IRB)	2019-present
ASU Masters in Nutritional Science Admissions Committee	2019-present
ASU CHS Translational Team and Affinity Network Review Committee, ad hoc	2019
ASU CHS Cancer Prevention & Control Translational Team	2019-present
ASU CHS Dissemination & Implementation Affinity Network Training Program Mentor	2019-present
ASU CHS Metabolic Health Translational Team (MHTT)	2018-present
Pre-Clinical Research Project Team	2018-present
American Diabetes Association MHTT Tour de Cure team, Co-Captain	2020
ASU CHS Grant Review Committee	2018-present
UCSD Center for Microbiome Innovation - Member	2016-present
Advisory Board	2018-2019
UCSD Women’s Cardiovascular Health Research Center	2016-2020
Executive Committee & Principal Investigator, Basic Science Project https://healthsciences.ucsd.edu/som/fmph/divisions/prevmed/research/wrc/Pages/default.aspx	
Scientista, UCSD Chapter – Faculty Advisor	2016-2018
UCSD Center for Circadian Biology	2015-present
Executive Committee (2016-present)	
Associate Director (July 2017-June 2018)	
UCSD Department of Medicine Committee on Academic Personnel (DOM CAP)	2015-2017
UCSD Women in Health Sciences Committee	2014-present
Co-Founder (2014)	
Spring Event Committee (Co-Chair , 2016-2018)	2016-present
Chair-Elect (2017-2018)	
UCSD Extension Postbaccalaureate Premedical Program - Admissions Committee & Mentor	2014-2018
UCSD Moores Cancer Center, Cancer Prevention & Control Program - Participating Member	2010-present
Senior Leaders Council (2018-present)	
UCSD School of Medicine Recruitment & Admissions Committee (RAC)	2007–2018
Chair , Executive Committee (2012-2015)	
Vice-Chair , Executive Committee (2011-2012)	
Executive Committee (2010-2018)	
UCSD School of Medicine Health Sciences Faculty Council (HSFC)	2012-15
UCSD School of Medicine Committee on Educational Policy (CEP)	2012-15
UCSD Transdisciplinary Research on Energetics and Cancer (TREC) Center	2011-16
Director , Developmental Projects Core (2011-16)	
Chair , TREC Consortium Biomarkers Working Group (UCSD/UPenn/WUStL/Harvard) (2011-14)	
Co-chair , TREC Consortium Biomarkers Working Group (2014-16)	
UCSD Clinical and Translational Research Institute (CTRI) - Associate Member	2010-present
UCSD Institute of Metabolomic Medicine	2012-2017
UCSD Department of Family Medicine & Public Health “Energy Balance, Obesity and Cancer Prevention” Center of Excellence	2013-2016
UCSD Department of Family Medicine & Public Health “Women’s Health” Center of Excellence	2012-present
UCSD/UCLA Diabetes Research Center (DRC)	2007-present
UCSD School of Medicine Core Curriculum Committee (CCC)	2010-12
UCSD Bioinformatics & Systems Biology Graduate Program – Faculty member	2010-2018
UCSD/Pfizer Diabetes Seminar Series - Coordinator	2005

Community Service & Leadership

American Diabetes Association - San Diego Area Community Leadership Board	2011-2018
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Board President (2011-2017)
Executive Leadership Committee (2013-2017)
Advocacy Committee (2012-2018)

American Diabetes Association - San Diego Research Committee 2009-2015
 Education & fundraising advocate, speaker, and “local researcher” participant for events
Committee Chair (2011-2015)

American Diabetes Association – Research Grant Review Committee (3-yr term) 2012-14
 Association for Women in Science (AWIS), Central Arizona Chapter (AWIS-CAZ) 2018-present
 Association for Women in Science (AWIS), San Diego Chapter (AWIS-SD) 2001-present
 AWIS-SD Executive Board

Past-President (2014-15)
President (2010-13)
Member-at-Large (2010)

AWIS-SD Scholars Celebration Planning Committee (**Chair**, 2014)
 AWIS-SD Women in Science & Technology (WIST) Conference - Planning Committee
Co-Chair, Facilities Subcommittee (2015)
Co-Chair (2013)

AWIS-SD Leadership Network (**Co-Founder** 2012; Member 2012-present)
 AWIS-SD Strategy Sessions Committee (**Co-Chair** 2009-10; Member 2007–15)
Co-organizer/presenter of 10+ career development seminars including topics:
 “Making an Impact,” “Speed Networking,” “Negotiation Skills,” “Develop Effective
 Communication,” “Get Promoted,” “Body Language”

External Research Grant Review Service

Pennsylvania Department of Health – 2008
 Michigan Metabolomics & Obesity Center/Nutrition Obesity Research Center– 2010
 Christian Doppler Research Association (CDG) [AUSTRIA] – 2011
 American Diabetes Association Research Grant Review Committee – 2012-2014 (3-yr term)
 Christian Doppler Research Association (CDG), Site Reviewer [AUSTRIA] – 2013
 Doris A. Howell Foundation for Women’s Health Research – 2014
 National Institute for Health Research (NIHR) Programme Grants for Applied Research [UNITED KINGDOM] –
 2015
 NIH/NIDDK Diabetes Endocrinology & Metabolism NRSA Fellowship Training Grant Review Committee –
 2015-present
 UCSD Clinical Translational Research Institute KL2 Grant Program – 2017
 Diabetes UK (leading UK non-profit supporting people with diabetes), grant application review – 2017
 UC San Diego Institute for Public Health (IPH) Pilot Project Grants, Phase I review – 2018
 Department of Defense Congressionally Directed Medical Research Program (DOD-CDMRP), grant
 application review – 2018
 NIH/NCI R13 Grant Review Committee - 2020

Manuscript Review Service

The Journal of Biological Chemistry – 2004
Molecular Genetics and Metabolism – 2005
 John Wiley & Sons, Inc. (Systems Biology book manuscript review) – 2007
PLoS ONE – 2009-present (**Guest Editor** 2017)
Diabetes – 2010+
Cell Metabolism – 2010+
Journal of Lipids Research – 2010-present
Journal of Inflammation – 2010-present

Diabetes Care – 2012-present
International Journal of Molecular Sciences – 2013
AJP- Renal Physiology - 2015
Cancer Epidemiology, Biomarkers & Prevention – 2015-present
Genome Biology - 2017
Journal of Human Nutrition & Dietetics – 2017-present
Hormone Molecular Biology & Clinical Investigation - 2017
Applied Physiology, Nutrition, and Metabolism – 2017-present
Obesity Research and Clinical Practice – 2018-present
Contemporary Clinical Trials Communications - 2018
Journal of Biological Rhythms - 2019
Nutrition Research – 2019-present
European Journal of Nutrition – 2019-present
Communications Biology – 2019-present
Obesity - 2019-present
Journal of the American College of Cardiology – 2019-present
New England Journal of Medicine - 2020

Industry Consulting and Laboratory Service

Pfizer (Laboratory Service Agreement) – 2005-2012
Metabolomics (Laboratory Service Agreement) – 2008-2011
Merck (Laboratory Service Agreement) – 2010-2011
Zone Labs, Inc. (Grant proposal consultant) – 2010-2011
Clinical Metabolomics, Inc. (Systems Biology consultant) – 2012-2015

INVITED PRESENTATIONS

2020:

ASU CHS Research Day: Flash Talk (Jan 31st)

“Get Up Off of Your Seat - Epigenetic and Physiologic Mechanisms Impacted by Prolonged Sitting Time”
NIH National Cancer Institute’s Time-Restricted Feeding & Intermittent Fasting Webinar Series (inaugural webinar, Mar 11th)

Organized by the Division of Cancer Control and Population Science’s (DCCPS) Behavioral Research Program (BRP). Initiative aims to foster cross-disciplinary behavioral and social science research on Time-Restricted Eating/Feeding (TRF) and Intermittent Fasting (IF) that can help prevent, treat, and/or control cancer.

Speaker and expert panelist

2019:

UCSD Center for Circadian Biology, Public Workshop (Feb 13th)

“It’s About Time for Health: Exercise, Light & Food” - Workshop Co-Organizer

Presentation: “Effect of Meal-Timing and Fasting on Rhythms, Sleep and Health”

ASU College of Health Solutions, Undergraduate Research Colloquium (Feb 19th)

“Healthy Behaviors, Health Solutions”

ASU College of Health Solutions, Grant Writing Workshop (Mar 14th)

“NIH Clinical Trials – What You Need to Know” Co-presented w/Nancy Osgood, & Matt Buman, PhD
American Association for Cancer Research (AACR), Annual Meeting (April 1st; Atlanta, GA)

Session: “Nonpharmacologic Approaches to Improving Survival and Patient-Reported Outcomes.”

Presentation: “Dietary interventions and cancer: Have we moved beyond a low-fat diet?”

Fleet Science Center, Sharp Minds Lecture Series (June 3rd; San Diego, CA)

“Prolonged Sitting Time Impairs Your Health and Reduces Your Life Span - Get Up, Stand Up!”

ADAPT Phoenix AZ (Oct 5th)

“Health Benefits of Food Intake Timing/Time-Restricted Feeding”
University of Arizona, Cancer Biology Program Seminar Series (Oct 21st)
“Dietary Interventions and Cancer: Have We Moved Beyond a Low-Fat Diet?”

2018:

American Gut Project Mini-Symposium (May 15th; La Jolla, CA)
“Nucleotides to Neighborhoods: Bridging Citizen Science to Defined Cohorts”
Quantified Self CVD Symposium (April 19th; La Jolla, CA)
“Why One Measurement Is Not Enough: Circadian Rhythms and Cardiometabolic Health”
19th Annual Meeting of the Society of Urologic Oncology (Nov 28th; Phoenix, AZ)
Co-Chair of and presenter during session “Fasting Interval, Metabolism, and Cancer Risk”
“Impact of Time-Restricted Feeding on Cancer Risk in Mice”
Conference highlights write-up about presentation [here](#)
Villanova University M. Louise Fitzpatrick College of Nursing and the MacDonald Center for Obesity Prevention and Education (COPE) Professional Webinar Series (Dec 12th)
“The Evidence: Impact of Intermittent Fasting and Food Intake Timing on Cardiometabolic Disease and Cancer Risk”
This webinar had the highest registration for the series in 2018.

2017:

Mayo Clinic (Scottsdale, AZ; telecast to Rochester, MN site)
“Novel Diet & Behavioral Interventions for Reducing Cardiometabolic Disease & Cancer Risk”
UCSD Center for Circadian Biology 8th Annual Symposium – From Cells to Clinic
“Translational Impact of Food Intake Timing on Cardiometabolic Disease & Cancer Risk”
UCSD Endocrine Grand Rounds
“Acute Effects of Interrupting Prolonged Sitting Time”
UCSD Center for Microbiome Innovation Research Summit
“Built Environment and Food Exposure Effects on Host and Gut Microbe Genomics”
UCSD FMPH Center of Excellence for Women’s Health
“Acute Glucoregulatory and Vascular Effects of Interrupting Prolonged Sitting Time: A Laboratory Study in Postmenopausal Women”
Washington State University College of Medicine – Faculty & Trainee Workshop
(with Cindy Simpson, Association for Women in Science)
“Strategies for Addressing Biases and Barriers in Advancing to Positions of Leadership”
Washington State University College of Medicine – Faculty & Trainee Workshop
(with Cindy Simpson, Association for Women in Science)
“Importance of Mentoring Relationships for Sustained Career Success”
C3 Scientific Retreat – Sanford Burnham Prebys Medical Discovery Institute
“Mechanisms Linking Prolonged Nightly Fasting with Cancer Risk”
14th Women in Science and Technology Conference: Explore, Encourage, Evolve
“P(l)ay it Forward: Past AWIS SD Presidents Panel”
Oncology Nutrition Dietetic Practice Group - Spotlight session for the Centennial Food & Nutrition Conference and Expo. (Chicago, IL)
“The Evidence: Intermittent Fasting Effects on Cardiometabolic Disease and Cancer”

2016:

Corona Rotary Club – “Stand Up and Reduce Your Risk!”
UCSD Frontiers in Innovation Scholars Program Symposium (Keynote Speaker)
“Researching the Frontiers of Biomedical Knowledge Using Innovative Transdisciplinary Science”
<https://students.ucsd.edu/sponsor/fisp/>
The Doris A. Howell Foundation for Women's Health Research Health Lecture Series (La Jolla, CA)
“Simple Lifestyle Changes for Improving Women’s Health” - La Jolla Light article about presentation:

<http://www.lajollalight.com/news/2016/jun/01/howell-speaker-touts-lifestyle-changes/>

Arizona State University School of Nutrition & Health Promotion's Spring Speaker Series

“Novel Diet & Behavioral Interventions for Reducing Cardiometabolic Disease & Cancer Risk”

NIH/NCI Transdisciplinary Research on Energetics & Cancer (TREC) Scientific Meeting (Bethesda, MD)

“Leveraging the Power of TREC: Cross-Center Study of Cancer Recurrence/Mortality Risk Biomarkers”

American Diabetes Association - Riverside Father of the Year Honorees Reception

Casa de las Campanas Retirement Community (San Diego, CA)

“Type 2 Diabetes: What Do We Know & What Can We Do About It?”

UCSD CVD/EPI NIH T32 Trainees Seminar Series

“Sedentary Behavior and Cardiometabolic Disease Risk”

2015:

Zone Diet Mexico Conference (2 presentations) (Mexico City, MX)

“Pilot Diet Intervention Study for Reducing Insulin Resistance in Obese Subjects with the Metabolic Syndrome”

“Novel Diet & Behavioral Interventions for Reducing Chronic Disease Risk”

National IRACDA Conference (San Diego, CA)

“Advocacy and Its Role in Shaping Science Policy, Politics, and Funding Opportunities” (Panelist)

Pint of Science, San Diego

“How Can You Reduce Your Risk of Type 2 Diabetes?”

UCSD Pathology Research Lecture Series

“Novel Diet & Behavioral Interventions for Reducing Insulin Resistance & Cancer Risk”

WGEA/WGSA/WOSR/WAAHP Regional Spring Meeting (San Diego, CA)

“Boundaries: Does Shadowing Cross the Line?” (Panelist)

UCSD Society for Advancement of Women in Anesthesiology (SAWA)

“Networking in Medicine”

American Diabetes Association - San Diego Father of the Year Honorees Reception

American Diabetes Association - Riverside Father of the Year Honorees Reception

UCSD Women's Conference “Campus Climate Change for Women in STEMM” (Panelist)

Video link below

American Diabetes Association – Greater San Diego Area Annual Meeting and Volunteer Awards (Temecula, CA)

“Sedentary Behavior: An Under-Studied, Mis-Understood Risk Factor for Type 2 Diabetes”

2014:

Transdisciplinary Research on Energetics & Cancer (TREC) Scientific Meeting (2 presentations) (Boston, MA)

“Novel Biomarkers of Energetics-Related Cancer Risk: Thinking Outside the Box”

“Lipidomic Profiling of Energetics-Associated Cancer Models in Mice”

Association for Women in Science – “Building a Leadership Network for Senior Career Level Women in Science” (national webinar)

Centers for Population Health & Health Disparities/Transdisciplinary Research on Energetics & Cancer (TREC) Conference (Los Angeles, CA)

“Diet Composition-Specific Intervention for Reducing Insulin Resistance and Cancer Risk in Obese Subjects: A Pilot Study”

UCSD Endocrine Grand Rounds

“Pilot Diet Intervention Study for Reducing Insulin Resistance in Obese Subjects with the Metabolic Syndrome”

We are WELL (San Diego community health organization)

“Recent Experimental Findings about Diet Interventions for Reducing Risk for Type 2 Diabetes”

2013:

UCSD Department of Family and Preventive Medicine

The Center for Ethics in Science and Technology - Exploring Ethics Series: “Women in Science: 50 Years After Silent Spring Series” (presentation & panelist) (San Diego, CA)
UCTV Video link below

2012:

UCSD General Internal Medicine Division Seminar Series
UCSD Topics and Advances in Internal Medicine CME Course
American Diabetes Association - Riverside Father of the Year Honorees Reception

2011:

NIH/NIDDK Workshop “Drug Response – A Tool for Understanding the Systems Biology of Type 2 Diabetes” (Bethesda, MD)
We are WELL (San Diego community health organization)
UCSD Endocrine Grand Rounds
UCSD Frontiers in Bioinformatics and Systems Biology Colloquium

2010:

University of Maryland School of Medicine
University of Wisconsin Department of Biochemistry
UCSD Hillcrest Biomedical and Clinical Research seminar series
American Diabetes Association - San Diego Father of the Year Honorees Reception
American Diabetes Association - 4th Annual Diabetes EXPO (Long Beach, CA)

Prior to 2010:

The 6th Aegean International Conference on Pathways, Networks & Systems Medicine – 2008
UCSD Atherosclerosis and Vascular Biology Seminar Series – 2008

ONLINE VIDEO INTERVIEWS/PRESENTATIONS/ARTICLES

Fitbit Blog (2019) “Just How Healthy is Intermittent Fasting?” by Alice Oglethorpe. Contains quotes from interview with Dr. Sears. <https://blog.fitbit.com/intermittent-fasting/>
Medscape Gastroenterology article (2018) “Hungry for Health: Fasting's Medical Benefits” by John Walker. Contains quotes from interview with Dr. Sears. https://www.medscape.com/viewarticle/898953_1
Food Sleuth Radio hosted by Melinda Hemmelgarn, R.D. (2017) 30-minute interview of Dr. Sears on the evidence supporting intermittent fasting and cardiometabolic disease and cancer risk.
Public Radio Exchange <https://beta.prx.org/stories/225407>
UC San Diego Community Marching for Science (2017 article, “Why I March”)
http://ucsdnews.ucsd.edu/feature/marching_for_science
UC San Diego Go Red For Women Strategically Focused Research Network – Sedentary Behavior Research in Latinas (2016, American Heart Association video and interview) - <https://youtu.be/bZHafjYbcus>
Campus Climate Change for Women in STEMM (2015, panelist) - <http://ucsdwomensconference.com/2015/03/19/session-video-campus-climate-change-for-women-in-stemm/>
Hera Hub “Women in Science Rock” (2014, interview) - <http://herahub.com/blog/2014/02/27/women-science-rock-dorothy-sears-ph-d/>
Career Girls “Diabetes Researcher” (2014, interview) - <http://www.careergirls.org/careers/diabetes-researcher>
Elsevier “Empowering Knowledge in the Lab and Beyond” (2015, interview) – <https://www.elsevier.com/connect/video-empowering-knowledge-in-the-lab-and-beyond>
American Diabetes Association Tour de Cure (2012, event promotion video) - <https://www.youtube.com/watch?v=FKsageRUAPg>
Women in Science: 50 Years After Silent Spring Series (2013, presentation & panel) - <http://www.uctv.tv/shows/Women-in-Science-50-Years-After-Silent-Spring-The-Silent-Spring-Series-Exploring-Ethics-24437>

Selecting a Mentor – Building a Successful Career (2012, panelist)

<https://www.youtube.com/watch?v=IE0rm4yBTsE>

ADDITIONAL TRAINING

Cultivating a Culture of Respect in the Academic Environment (UCSD OFA, PACE, OPHD, EDI)	2018
CITI Biomedical Research Certification	2011-present
TREC Consortium Training Workshop (Los Angeles, CA) - "Media Communications Training"	2014
TREC Consortium Training Workshop (Boston, MA) - "Energy Balance Research in Cancer Survivors: Integrating Medical Oncology and Behavioral Science"	2014
TREC Consortium Training Workshop (San Diego, CA) - "Career Development and Mentoring for Young Investigators"	2013
AAMC Mid-Career Women Faculty Professional Development Seminar (3 days, Austin, TX)	2013
TREC Consortium Training Workshop (Washington University, St. Louis) - "Cost effectiveness with a broad focus for multiple disciplines"	2012
UCSD Medical Education Development Series – regular attendee	2008-present
UCSD Extension – “Intermediate Statistics”	2005
UCSD National Center of Leadership in Academic Medicine (NCLAM)	2005
UCSD Pathology 241 – “Ethics and Survival Skills in Academia”	2003
UCSD Extension– “Biostatistics” & “Microarray Technologies: An Overview”	2003
UCSD Extension– “Database & Genome Analysis” workshop	2002

TEACHING, ADVISING, MENTORING EXPERIENCE

Formal Teaching

ASU Course NTR 511 “Medical Nutrition” (Fall Semester, Session B)	2019-present
ASU Course NTR 290 “Intro to Evidence-Based Practice” (Fall Semester, Session C)	2019
ASU Course NTR 535 “Nutrigenomics” (Spring Semester, Session A)	
ASU Course NTR/EXW 791 Lecture: “Scholarly Impact” (Jan 29, 2019; Feb 4, 2020)	2019-present
ASU Course Mayo School of Medicine Selective “Food as Medicine” Lecture “Anti-Inflammatory Diet” (Mar 14 th)	2019
Lecture “Food Intake Choices that Modulate Glycemic Exposure and Obesity-Related Disease Risk: Intermittent Fasting and Low Glycemic Foods” (Mar 13 th)	2020
Transdisciplinary Research in Energetics & Cancer Training Course; NIH/NCI R25 CA203650 Week-long summer workshop and year-long mentorship of 2 trainees per year	2016-present
UCSD Course NEU 233 “Circadian Biology & Health”; Course Co-Director Lecture “Impact of Food Intake Timing on Cardiometabolic Disease and Cancer Risk”	2018-present
UCSD Course SOMC 223 “Renal System” – Problem Based Learning Facilitator	2017-2018
UCSD Course SOMC 223 “Gastrointestinal System” – Problem Based Learning Facilitator	2013-2018
UCSD Course SOMC 227 “Mind, Brain & Behavior” – Problem Based Learning Facilitator	2012-14,16,17
UCSD Course SOMC 220 “Foundations of Human Biology” – Literature Group instructor	2010-14
UCSD Courses SOMC 229A “Endocrinology/Reproduction/Metabolism” – Problem Based Learning Facilitator	2010-2018
UCSD Courses SOMC 221A “Cardiovascular System”– Problem Based Learning Facilitator	2010-11,14,15
UCSD Course SOMC 230A “Microbiology/Immunology”– Problem Based Learning Facilitator	2011
UCSD Course SOM204 “Cell Biology & Biochemistry” – Reading Group Workshop instructor	2006-09
UCSD Course SOM209 “Endocrinology, Reproduction & Metabolism” Facilitator for Problem-Based Learning & Small Group Discussion sections	2006-10
UCSD Course BIOM226 Hormone Action - “Receptors” & “Signaling” lectures	2006-08
UCSD Course MED260 Modern Techniques of Biomedical Research “Protein Expression In Vitro” lecture	2003

Clinical Fellows:

Barbara Ramlo-Halsted, M.D. (1996-98) (Research advisor) – Currently Assistant Professor, Director of The Diabetes Center, University of Cincinnati School of Medicine
Andrej Janez, M.D. (1998-1999) (Research advisor) – Currently Professor, Head of Dept. of Endocrinology and Diabetes at University Medical Center Ljubljana, Slovenia.
Adrienne Nassar, M.D. (2011-2013) – Currently Endocrinologist at Kaiser Permanente in San Diego, CA.
Ellen Lee, M.D. (2017-2019) (Research co-advisor)

Postdoctoral Fellows/Visiting Scholars:

Yessica Diaz Roman, D.P.H. (2013-2017) (Research advisor)
Adriana Villaseñor, Ph.D. (2013-2019) (Research co-advisor)
Marta Jankowska, Ph.D. (2013-2017) (Research co-advisor, co-PI)
Morgana Mongraw-Chaffin, Ph.D. (2013-2016) (Research co-advisor)
Lorena Martin, Ph.D. (2013-2016) (Research co-advisor)
Michelle Takemoto, PhD (2017-2019) (Research co-advisor)
Ya-Ju Chang, PhD (2018-present) (Research advisor)
John Bellettiere, PhD (2018-2019) (Research co-advisor)
Nour Makarem, PhD (2017-2019) (Research co-advisor, co-PI)

Clinical Faculty:

Jamie Resnik, M.D. (2001-02) (Research advisor) – Currently Clinical Professor of Reproductive Medicine, UC San Diego

Assistant/Associate Faculty:

Sheri Hartman, Ph.D. (2013-2019) (NIH/NCI K07 Award Research Mentor) – Currently Assistant Professor of Family Medicine and Public Health, UC San Diego
Marta Jankowska, Ph.D. (2017-present) (Co-PI, co-investigator) - Currently Assistant Research Scientist, Center for Wireless Technology, UC San Diego
Nour Makarem, PhD (2019-present) (NIH K99/R00 Award Mentor) – Currently Assistant Research Scientist at Columbia University Medical Center
Abhinav Acharya, PhD (2019-present) – Currently Assistant Professor at Arizona State University
Corrie Whisner, PhD, RD (2019-present) - Currently Assistant Professor at Arizona State University
Sonia Vega Lopez, PhD, RD (2019-present) – Currently Associate Professor at Arizona State University

Medical Students:

Hayley Baines, M.D. (2008-2012) – Independent Study Project (ISP) committee member.
Yarah Haidar, M.D. (2009) – Faculty mentor.
Benjamin Maslin, M.D. (2010-2012) – Independent Study Project (ISP) committee member.
Suzanne Hyun, M.D. (2010-2013) – Independent Study Project (ISP) committee member.
Praveena Selvaduray, M.D. (2012-2014) – Independent Study Project (ISP) Committee Chair. Currently OB/GYN resident, Kaiser Permanente San Diego.
Jenny Koo, M.D. (2014) – Independent Study Project (ISP) committee member. Currently Neonatology Fellow, UCSD Pediatrics/Rady Children's Hospital.
Susan Duan, M.D. (2014) – Independent Study Project (ISP) committee member. Currently Internal Medicine – Pediatrics resident, Baylor College of Medicine.
Simmi Deo (2012-2016) - Independent Study Project (ISP) Committee Chair. Currently Psychiatry Resident, University of Iowa.
Eleasa Sokolski (2013-2016) - Independent Study Project (ISP) committee member.
Christine Sugimoto (2015-2019) - Independent Study Project (ISP) Committee Chair. Currently MS4.
Torrey Czech (2016-present) - Independent Study Project (ISP) Committee Chair. Currently MS3.

Skaggs School of Pharmacy & Pharmaceutical Sciences Student:

Tiffany Wong, Pharm.D. (2010) – Research advisor for Summer Research Training Fellowship. Pharm.D. granted in 2012.

Iris Chen, Pharm.D. (2011) - Research advisor for Summer Research Training Fellowship. Pharm.D. granted in 2013, currently Oncology Pharmacist at UC Davis Medical Center.

Graduate Students Trainees:

Albert Hsiao, MD, PhD (2003-2005) – Bioengineering Ph.D. thesis research advisor and committee member.

Currently Assistant Professor of Radiology and Associate Director of Cardiovascular Diseases for the Center for Translational Imaging and Personalized Medicine (CTIPM) at UCSD. Ph.D. in 2005, M.D. in 2007.

Gene Hsiao, PhD (2004-2010) - PhD thesis research co-advisor and committee member. Bioengineering PhD in 2010.

Divya Thapar, MD, MS (2007-2008) - Master's Thesis research advisor. MS degree granted 2008, earned MD at UCSF in 2014. Currently ED Resident at UCSF.

Merrie Mosedale, PhD (2007) - Minor Committee Member. PhD in 2012, School of Medicine BSMS program.

Alex Thomas (2011-2015) – PhD thesis research advisor and committee member, Senate Exam Committee Co-Chair. PhD granted in 2015.

Madlena Nalbandian, MD, MS, MPH (Fall 2012-2013) - Master's Thesis research advisor. MS in 2013. MD and MPH in 2017 from St. George's University Medical School. Currently Internal Medicine Resident Physician

Nassim Ajami, PhD (2013-2018) – Rotation project research advisor & thesis research co-mentor in the Bioinformatics & Systems Biology Graduate Program of the UCSD Jacobs School of Engineering. PhD granted in 2018.

Anthony Aylward (2013-present) – Rotation project research advisor & thesis committee member. Currently a PhD student in the Bioinformatics & Systems Biology Graduate Program of the UCSD Jacobs School of Engineering.

Catherine Marinac, PhD (2013-2016) – (PhD Thesis Committee) – PhD granted in 2016, UCSD/SDSU Joint Doctoral Program. Currently Postdoctoral fellow at Harvard University School of Public Health.

Rachel Marty (2015-2016) – Rotation project research advisor. Currently a PhD student in the Bioinformatics & Systems Biology Graduate Program of the UCSD Jacobs School of Engineering.

Lorena Pacheco (2016-2019) - PhD thesis research co-advisor and committee member. UCSD/SDSU Joint Doctoral Program. PhD granted in 2019.

Kristina Mardinian, MPH (2017) - MPH, lab research advisor. UCSD/SDSU Joint Program. MS granted in 2018.

Kaitlin Bessinger, MS (2018) - Master's Thesis research advisor. MS granted in 2018. UC San Diego BS/MS program.

Benjamin Sarno (2018-present) - PhD thesis research co-advisor and Senate Exam Co-Chair; UCSD Nanobiology Graduate Program.

Tiffany Gandolfo (2017-present) - PhD Thesis Committee Member; University of South Florida

Makenna Baum (2018-2019) – Masters Thesis Committee Member; ASU College of Health Solutions. MS granted in 2019.

Adam Seal (2018) – NIH/NIDDK F31 Training Grant Application Co-Sponsor; ASU College of Health Solutions

Alex Mohr (2019-present) – PhD Supervisory & Dissertation Committee; ASU College of Health Solutions

Kristina Hasanaj (2019-present) – PhD Supervisory & Dissertation Committee; ASU College of Health Solutions

Miranda Larouche (2019-present) – PhD Supervisory Committee; ASU College of Health Solutions

Savannah Regensburger (2019) – MS in Medical Nutrition student; NTR593 Applied Project Mentor

Sara Lolley (2019-present) – Masters Thesis Committee; ASU College of Health Solutions

Selicia Mayra (2019-present) – PhD Supervisory & Dissertation Committee; ASU College of Health Solutions

Armando Peña (2019) – NIH/NIDDK F31 Training Grant Application Co-Sponsor; ASU College of Health Solutions

Natalie Kopplin (2019-present) – Masters Thesis Committee; ASU College of Health Solutions

Kelly Chondropoulos (2019-present) – Masters Thesis Committee; ASU College of Health Solutions

Amanda Harb (2019-present) - Masters Thesis Advisor; ASU College of Health Solutions

Undergraduate Student Trainees:

Jessica Chao (Winter/Spring 2006) (BISP199 Research advisor, UCSD Faculty Mentor Program – Mentor) – BS in 2007

Jeff Lee (Winter 2008) - BISP199 Research advisor. BS in 2008

Simmi Deo (2012) (Research advisor) – BS degree granted in 2012, currently 2nd year medical school student at UCSD.

Madlena Nalbandian, MD, MS, MPH (2010-2012) (Research advisor) – BS degree granted in 2012, currently medical student at St. George’s University Medical School.

Olushade Unger (2013-2014) (Research advisor) – BS degree granted in 2014.

Steven Noh (Summer 2015) (Research advisor) – UC Berkeley undergraduate.

Savannah Afsahi (2015-2016) (Research advisor) – UC San Diego undergraduate.

Basma Abdellaoui (2016-2019) (Research advisor) – UC San Diego undergraduate. BS granted in 2019.

Sabrina Aden (2016-2018) (Research advisor) – SDSU undergraduate. NIH U54 UCSD/SDSU Partnership Program. BS granted in 2018.

Kaitlin Bessinger, MS (2017-2018) (Research advisor) - BS degree granted in 2017, MS degree granted in 2018. UC San Diego BS/MS program.

Max Fang (2017-2018) (Research advisor) – SDSU undergraduate. NIH U54 UCSD/SDSU Partnership Program. BS granted in 2018.

Cloie Chiong (2018-2019) (Research advisor) - UC San Diego undergraduate. BS granted in 2019.

Yesenia Avitia (2018-2019) (Research advisor) – SDSU undergraduate. NIH U54 UCSD/SDSU Partnership Program. BS granted in 2019.

Joseph Maestas (2018-present) (Research advisor) – UC San Diego undergraduate.

Sabrina Ephrem (2019) (Research advisor) – SDSU undergraduate. NIH U54 UCSD/SDSU Partnership Program.

High School Research Trainees:

Divya Bhat (summer 2006 and 2007) – Lab research advisor

Courtney Chaplin (Winter/Spring 2014) (Research advisor) – High school diploma in 2014, currently an undergraduate student at UC Davis.

Amal Gebara-Lamb (Summer 2015) (Research advisor) – High school diploma in 2016 from Torrey Pines High School, currently an undergraduate student at UC Davis.

John Finkelman (Summer 2017 & 2018) – Lab research advisor. High school diploma in 2019 from Torrey Pines High School.

Madeline Dow (Summer 2018) (Research advisor) – Lab research advisor.

PUBLICATIONS - DOROTHY DEE SEARS & DOROTHY SEARS WORRALL

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Google Scholar [Profile](#): Citations: 4135 h-index: 37 i10-index: 48 (February 23, 2020)

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- Note: Annual Reviews published 1,098 review articles across 47 disciplines in 2017. This review was one of the 10 most downloaded from their website in 2017 as of January 2018 (only 5 months after publication)*

date). It was one of 10 most-read Annual Reviews articles overall in [2018](#) and [2019](#). As of February 2020, this review has an [Altmetric Attention Score of 610](#), which sets it 1) in the top 5% of all research outputs scored by Altmetric, 2) as the second highest-scoring outputs from Annual Review of Nutrition (#2 of 529), and 3) in the 99th percentile compared to other scholarly outputs of the same age. It is the first reference cited for WebMD slideshow "[Fasting: What You Should Know](#)" and cited in the Wikipedia page for "[Intermittent Fasting](#)."

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ABSTRACTS PUBLISHED AND PRESENTED

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16. **Sears, D.D.**, Horenstein, R.B., **Snitker, S.** (2011) Identifying candidate genes for thiazolidinedione-induced insulin-sensitization responsiveness by expression microarrays of human tissues. American Diabetes Association Scientific Sessions; June 2011. Oral presentation.
17. **Chung, H.**, Ellies, L.G., **Sears, D.D.**, Webster, N.J., Olefsky, J.M. (2011) Diet-induced and genetic obesity promote mammary tumor growth in ovariectomized mice. American Association for Cancer Research (AACR) - Advances in Breast Cancer Research: Genetics, Biology and Clinical Applications. Oct 2011. Poster presentation.
18. **Chen, I.**, Chen, M., Nalbandyan, M., Talukdar, S., Ofrecio, J., Miller, Y.I., and **Sears, D.D.** (2012) The Effects of Omega-3 Fatty Acids on Adipose Tissue Inflammation. Annual NIH Short-term Research Training Grants Poster Presentation; Jan 2012. Poster presentation. Awarded "Best Use of Literature."
19. **Thomas, A.**, Palsson, B., **Sears, D.D.** (2012) Assessing metabolite production capabilities in adipose tissue. LIPID MAPS Annual Meeting; May 2012. Poster presentation.
20. **Decleves, A.-E.**, Satriano, J., Cunningham, Z.Z., Thomas, A., Nortier, J.L., Farquhar, M.G., **Sears, D.D.**, Quehenberger, O., Dennis, E.A., Naviaux, R.K., Sharma, K. (2012) Lipidomic Analysis of Kidney Tissue in a High-Fat Diet Model: a Key Role of AMPK in Lipid Content and Storage. American Society of Nephrology Meeting; Nov 2012. Poster presentation.
21. **Lazic, M.**, Inzaugarat, E., Povero, D., Cherňavsky, A., Chen, I., Chen, M., Nalbandyan, M., Miller, Y.I., Feldstein, A., **Sears, D.D.** (2013) Reduced Dietary Omega-6:Omega-3 Ratio and 12/15-Lipoxygenase Deficiency Protect from High Fat Diet-Induced Steatohepatitis. European Association for the Study of the Liver meeting; April 2013. Poster presentation.
22. Lazic, M., Inzaugarat, E., Povero, D., Cherňavsky, A., Chen, I., Chen, M., Nalbandyan, M., Miller, Y.I., Feldstein, A., **Sears, D.D.** (2013) Reduced Dietary Omega-6:Omega-3 Ratio and 12/15-Lipoxygenase Deficiency Protect from High Fat Diet-Induced Steatohepatitis. LIPID MAPS annual meeting; May 2013. Poster presentation.
23. **Eguchi, A.**, Lazic, M., Mulya, A., Berk, M.P., Gomicka, A., Phillips, S., **Sears, D.D.**, Feldstein, A.E. (2013) Adipocyte-derived microparticles are increased in obesity and promote inflammation through macrophage migration. Cell Symposia, Immunometabolism: from Mechanisms to Therapy; June 2013. Poster presentation.
24. Herbst, K.L., Nalbandian, M., Elinger, R.E., Deo, S.K., Nassar, A., Khemlina, G., Perry, M., Sears, B., **Sears, D.D.** (2013) Novel dietary interventions for treating insulin resistance. UCSD/UCLA Diabetes Research Center Annual Retreat; August 2013. Poster presentation.

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26. **Inzaugarat M.E.**, Lazic M., Povero D., Chen I., Miller Y.I., **Sears D.**, Chernavsky A., Feldstein A. (2013) A low dietary w6/w3 ratio or a 12/15-lipoxygenase deficiency impair the development of hepatic inflammation and steatosis in mice. LXI Annual Meeting of the Argentinean Society of Immunology. November 2013. Los Cocos, Córdoba, Argentina. Poster presentation.
27. **Inzaugarat M.**, Lazic M., Billordo L., Daruich J., Chen I., **Sears D.**, Gonzalez Ballerga E., Feldstein A., Sorda J., Cherñavsky A. (2013) A potential dietary therapeutic approach for non-alcoholic fatty liver disease. LXI Annual Meeting of the Argentinean Society of Immunology. November 2013. Los Cocos, Córdoba, Argentina. Poster presentation.
28. **Deo, S.K.**, Martin, L., **Sears, D.D.** (2014) Effect of diet intervention on inflammation-related gene expression in circulating monocytes from metabolic syndrome patients. Annual NIH Short-term Research Training Grants Poster Presentation; Jan 2014. Poster presentation.
29. **Deo, S.K.**, Martin, L., **Sears, D.D.** (2014) Effect of diet intervention on inflammation-related gene expression in circulating monocytes from metabolic syndrome patients. American Federation for Medical Research, Western Regional Meeting; Jan 2014. Oral presentation.
30. **Schneider, D.A.**, Fang, L., **Sears, D.D.**, Miller, Y.I. (2014) Apolipoprotein A-I Binding Protein is protective against inflammation and high-fat diet-induced metabolic syndrome. Deuel Conference: Obesity, Diabetes and Atherosclerosis; March 2014. Poster presentation.
31. **Martin, L.**, Deo, S.K., **Sears, D.D.** (2014) Effect of diet intervention on inflammation-related gene expression in CD14+ circulating monocytes from metabolic syndrome patients. Experimental Biology Conference; April, 2014. Poster presentation. *Finalist in the Nutrient-Gene Interaction Research Interest Section poster competition.* The FASEB Journal 28 (1 Supplement), 1037.10
32. Herbst, K.L., Nalbandian, M., Elinger, R.E., Deo, S.K., Nassar, A., Khemlina, G., Perry, M., Sears, B., **Sears, D.D.** (2014) Diet composition-specific intervention for reducing insulin resistance and cancer risk in obese subjects: A pilot study. CPHHD-TREC Joint Symposium; May 2014. Oral presentation.
33. **Aylward, A.**, Armando, A., Quehenberger, O., **Sears, D.D.** (2014) Effects of diet intervention on plasma eicosanoid profiles in obese human subjects. LIPID MAPS Annual Meeting; May 2014. Poster presentation.
34. **Ajami N**, Thomas A, **Sears DD**. (2014) Lipidomic profiles of human adipose tissue associated with insulin resistance. LIPID MAPS Annual Meeting; May 2014. Poster presentation.
35. Quehenberger O, Armando A, Natarajan L, Li H, Chung H, Ellies L, Webster N, Belka G, Sterner C, Benesh E, Moley K, Chodosh L, **Sears DD**. (2014) Lipidomic profiling of energetics-associated cancer models in mice. TREC Scientific Meeting; Nov 2014. Oral presentation.
36. **Marinac C**, Arredondo E, Gallo L, Hartman S, Natarajan L, **Sears DD**, Patterson R. Prolonged nightly fasting and breast cancer risk: findings from NHANES (2009-2010). (2015) AACR Annual Meeting; Apr 2015. Poster presentation.
37. **Marinac C**, **Sears DD**, Natarajan L, Gallo LD, Breen C, and Patterson RE. (2015) Frequency and circadian timing of eating may influence metabolic risk of breast cancer. AACR Special Conference on Metabolism and Cancer; June 2015. Poster Presentation.
38. **Roman YD**, Martin L, Becerra BJ, **Sears DD**. (2015) Diabetes Management Class Utilization in Hispanics vs. Non-Hispanics, BRFSS 2012. UC San Diego Public Health Research Day; Apr 2015. Poster presentation.
39. **Marinac CR**, **Sears DD**, Nelson SH, Natarajan L, Breen CI, Pierce JP, Patterson RE. (2015) Prolonged nightly fasting and breast cancer prognosis. TREC Scientific Meeting; Sept 2015. Poster presentation.
40. **Sears DD**, Chung H, Chou W, Patterson RE, Webster N, Ellies L. (2015) Effects of time-restricted feeding intervention on insulin resistance, adiposity, and locomotor activity in an obese, postmenopausal mouse model. TREC Scientific Meeting; Sept 2015. Poster presentation.

41. Bellettiere J, Carlson JA, Rosenberg D, Singhanian A, Natarajan L, Berardi V, LaCroix AZ, **Sears DD**, Moran K, Crist K, & Kerr J. (2015). Gender and Age Differences in Hourly and Daily Patterns of Sedentary Time in Older Adults Living in Retirement Communities. 9th International Conference of Diet and Activity Measurement. Brisbane, Australia. Sept 2015. Poster presentation.
42. Afsahi S, Goldsmith B, **Sears DD**, Barron F. (2016) Comparison of a Novel Commercial Immunoassay, AGILE Research, and the Meso Scale Discovery Array System for the Quantification of Insulin and Leptin in Human Plasma. Experimental Biology Conference; April, 2016. Poster presentation.
43. Ehrlich C, Iker E, Herbst KL, Kahn L-A, **Sears DD**, Kenyon M. (2016) Eating to Starve Lymphedema and Lipedema. 12th National Lymphedema Network International Conference; August 2016. Poster presentation.
44. Ehrlich C, Iker E, Herbst KL, Kahn L-A, **Sears DD**, Kenyon M. (2016) Vitamins, Minerals, and Supplements for Lymphedema and Lipedema. 12th National Lymphedema Network International Conference; August 2016. Poster presentation.
45. Eguchi A, Lazic M, Armando AM, Phillips SA, Quehenberger O, **Sears DD**, Feldstein AE. (2016) Perilipin a is a Novel Biomarker of Circulating Adipocyte-Derived Extracellular Vesicles in Both Murine Models of Obesity and Obese Humans. European Association for the Study of the Liver meeting; April 2016. Poster presentation. *J Hepatology* 64 (2) Suppl. S672–S673.
46. Hartman SJ, Nelson SH, Myers E, Natarajan L, **Sears DD**, Palmer BW, Parker BA, Patterson RE. (2017) Increasing physical activity and changes in cognitive functioning in breast cancer survivors: A randomized controlled pilot study. 38th Annual Society of Behavioral Medicine Meeting; March 2017 Meeting. Poster presentation.
47. Lee SMC, Rana BK, Stenger MB, **Sears DD**, Smith SM, Zwart SR, Macias BR, Hargens AR, Sharma K, and De Vivo I. (2017) Metabolomic and genomic markers of atherosclerosis as related to oxidative stress, inflammation, and vascular function in twin astronauts. NASA Human Research Program Investigators' Workshop; January 2017. Oral presentation.
48. Mongraw-Chaffin M, Bertoni AG, Golden SH, Mathioudakis N, **Sears DD**, Szklo M, Anderson CAM. (2017) Association of subclinical hypoglycemia with incident cardiovascular disease and all-cause mortality: The Multi-Ethnic Study of Atherosclerosis. American Heart Association EPI/Lifestyle Scientific Sessions; March 2017. Poster presentation. *Circulation* 135 (Suppl 1), AP051-AP051.
49. Aden SA, Kerr J, Crist K, Vital D, Dillon L, Castellanos LR, Allison M, Khemlina G, Takemoto M, Schenk S, Sallis J, Dunstan D, Natarajan L, LaCroix AZ, **Sears DD**. (2017) Acute Effects of Sitting Interruption Modalities on Plasma Glucose in Postmenopausal Women. San Diego State University Student Research Symposium; March 2017. Poster presentation. Recipient of Undergraduate Research Excellence Award.
50. Vital DG, Kerr J, Crist K, Dillon L, Aden SA, Trivedi M, Castellanos LR, Godbole S, Li H, Allison MA, Khemlina GL, Takemoto ML, Schenk S, Sallis J, Grace M, Dunstan D, Natarajan L, LaCroix AZ, **Sears DD**. (2017) Acute glucoregulatory and vascular outcomes of three strategies for interrupting prolonged sitting time in postmenopausal women: A laboratory-based pilot study. UCSD Institute for Public Health Public Health Research Day; April 2017. Poster presentation.
51. Felgar E, Jankowska M, **Sears DD**, Dillon L, Kerr J. (2017) Building a Literature Base and Analytic Protocol for Linking Self-Reported Depression and Anxiety to the Gut Microbiome in the Community of Mine Study. UCSD Institute for Public Health Public Health Research Day; April 2017. Poster presentation.
52. Araiza D, Hartman S, Godbole S, Crist K, Patterson R, **Sears DD**, Natarajan L, Kerr J. (2017) Association Between Inflammation and Quality of Life in Breast Cancer Survivors. UCSD Institute for Public Health Public Health Research Day; April 2017. Poster presentation.
53. Full KM, Hartman SJ, Natarajan L, **Sears DD**, Kerr J, Patterson RE. (2017) Using Isotemporal Analyses to Examine the Relationships Between Daily Activities & Biomarkers in Breast Cancer Survivors. San Diego Epidemiology Research Exchange (UCSD Moores Cancer Center); May 2017. Oral presentation.
54. Takemoto, M., Schechtman, M., Villa, N., Talavera, T., **Sears, D.**, Owen, N., Rosenberg, D., Dunstan, D., Allison, M., Kerr, J. Arriba por la Vida Estudio (AVE): Development of a Sedentary Behavior Intervention

Targeting Post-Menopausal Latinas. American Heart Association Annual Meeting: Anaheim, CA; November 2017. Oral presentation.

55. Makarem N, Aggarwal B, St-Onge M-P, **Sears DD**, Castaneda SF, Marinac CR, Talavera G, Sotres-Alvarez D, Garcia ML, Gallo LC. (2018) Nightly Fasting Duration is Associated with Cardiometabolic Risk Profiles among Hispanic/Latina Women in the Hispanic Community Health Study/Study of Latinos. American Heart Association EPI|Lifestyle Scientific Sessions. March 2018. Poster presentation.
56. Jankowska MM, **Sears DD**, Godbole S, Kerr J. (2018) Effects of compounding exposure to environmental stress on insulin resistance in Hispanic and non-Hispanic adults. UCSD Institute for Public Health Public Health Research Day; April 2018. Poster presentation.
57. Makarem N, Aggarwal B, **Sears DD**, St-Onge M-P, Castañeda SF, Talavera GA, Marinac CR, Patterson R, Sotres-Alvarez D, Garcia ML, Gallo LC. (2018) Circadian Timing of Food Intake is Associated with Cardiometabolic Risk in US Hispanics/Latinos: Results from the Hispanic Community Health Study/Study of Latinos. American Heart Association Scientific Sessions; Nov 2018. Oral presentation. [Circulation. 2018;138 \(Suppl 1\):A11503.](#)
58. Bellettiere, J, Ervin, D, Godbole S, Keshevarz S, Maestas J, Unkart J, Allison M, Rock CL, Patterson RE, Kerr J, Natarajan L, **Sears DD**. (2018). Ethnic Differences in Sitting Time and Associations of Sitting Time with Cardiometabolic-Risk Biomarkers in Postmenopausal Women. Gerontological Society of America Annual Scientific Meeting. Boston, MA. November 2018. Poster presentation.
59. Maestas JP, Bellettiere J, Ervin D, Godbole S, Keshevarz S, Chang Y-J, Avitia Y, Unkart J, Haimovich A, Gurrola ML, Allison M, Talavera G, Rock CL, Patterson RE, Kerr J, Natarajan L, **Sears DD**. (2018) Ethnic Differences in Sitting Time and Associations of Sitting Time Patterns with Cancer-Related Cardiometabolic Risk Biomarkers in Postmenopausal Women. UCSD Moores Cancer Center Delivering Discoveries Scientific Retreat. La Jolla, CA. November 2018. Poster presentation.
60. Takemoto M, **Sears D**, Talavera G, Allison M, Villa N, Kerr J. Individual behavior change strategies for reducing sedentary time in older adults. International Society for Behavioral Nutrition and Physical Activity Annual Meeting: Hong Kong, China, June 4-6, 2018. Oral presentation.
61. Chiong CL, Chang Y-J, Godbole S, Bellettiere J, Rock CL, Patterson RE, Kerr J, Jankowska M, Allison M, Natarajan L, **Sears DD**. (2019) Investigating the Relationship Between Sitting Time on DNA Methylation: A Predictive Marker of Aging and Disease Risk. 5th Annual UCSD Public Health Research Day, La Jolla, CA. April 2019. Poster presentation.
62. Avitia Y, Chang Y-J, Godbole S, Bellettiere J, Rock CL, Patterson RE, Kerr J, Allison M, Natarajan L, **Sears DD**. (2019). Associations between sedentary patterns and cardiometabolic disease-associated microRNAs among postmenopausal women. 5th Annual UCSD Public Health Research Day, La Jolla, CA. April 2019. Poster presentation.
63. Chiong CL, Chang Y-J, Godbole S, Bellettiere J, Rock CL, Patterson RE, Kerr J, Jankowska M, Allison M, Natarajan L, **Sears DD**. (2019) Investigating the Relationship Between Sitting Time on DNA Methylation: A Predictive Marker of Aging and Disease Risk. 2019 UCSD Biology Research Showcase, La Jolla, CA. June 2019. Poster presentation.
64. Withycombe JS, Mitchell R, Castellino S, **Sears DD**, Lin Y, McFatrigh M, Reeve B, Pediatric PRO-CTCAE Study Team. Metabolomic Pathways and Biomarkers Associated with Pediatric Patient Reported Outcomes (PRO) during Childhood Cancer. Annual Conference of the Pediatric Research Alliance. Atlanta, GA. June 2019. Oral presentation.
65. Chang, Y-J, Avitia Y, Godbole S, Bellettiere J, Rock CL, Patterson RE, Jankowska MM, Kerr J, Allison MA, Natarajan L, **Sears DD**. (2019) Circulating extracellular vesicles as novel biomarkers of cardiovascular risk in older women with different sitting time patterns. American Heart Association Basic Cardiovascular Sciences 2019 Scientific Sessions: Approaches to Complex Cardiovascular Diseases. July 2019. Boston, MA. Poster presentation.
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Network. American Heart Association 2019 Scientific Sessions. November 2019. Philadelphia, PA. Oral presentation. [Circulation. 2019;140 \(Suppl 1\):A11503](#). [Press release](#).

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MISCELLANEOUS

1. Tugendreich, S., Feng, Q.H., Kroll, J., [Sears, D.D.](#), Boeke, J.D., Hieter, P. (1994) Alu sequences in RMSA-1 protein? *Nature* 370(6485):106. (Letter to the Editor) PMID: 8022478.
2. Chapman, J., [Worrall, D.S.](#), North, M., Olefsky, J.M. (2003) Diagnostics & Therapeutics for the Gene Expression Signature of PPAR γ Receptor Ligands. U.S. Patent Application #10/791,950; filed 03/03/04.
3. Bingham, JT, Chapman, JG, North, MA, [Sears, DD](#) (2008+) Method for Controlling Glucose Uptake and Insulin Sensitivity. Patents #: WO2008131094-A1 (2008); WO2008131094-A8 (2009); EP2140268-A1 (2010); CA2684254-A1 (2008); JP2010524961-W (2010); US2011008328-A1 (2011). Patent application.

RESEARCH SUPPORT

Ongoing Research Support

P01 AG052352-01 (Program PI – LaCroix)

07/01/17-06/30/22

NIH/NIA

SEDENTARY BEHAVIOR INTERRUPTED: ACUTE, MEDIUM AND LONG-TERM EFFECTS ON BIOMARKERS OF HEALTHY AGING, PHYSICAL FUNCTION AND MORTALITY

Aim: Investigate the short-, medium-, and long-term effects of sedentary behavior interruptions on biomarkers associated with age-related, chronic disease in post-menopausal women. Project 1 ([Sears - PI](#)) is a clinical laboratory study of acute effects, Project 2 (Kerr – PI) is a randomized controlled trial of medium-term effects, and Project 3 (LaCroix – PI) is an epidemiological study of long-term effects. The Sedentary Time & Aging Research (STAR) Program is supported by Administrative & Biostatistics Cores.

STAR Program website: <http://riseforhealth.ucsd.edu/>

Roles:

PI – Project 1 “Sedentary Behavior Interrupted: A randomized crossover trial of acute effects on biomarkers of healthy aging in the laboratory” (AKA “Rise for Health – Lab Study; ClinicalTrials.gov ID: NCT03511352, UCSD IRB Protocol ID: 171547)

Co-Investigator – Project 2 “Sedentary Behavior Interrupted: A randomized trial of 3-month effects on biomarkers of healthy aging and physical functioning in the real world” (AKA “Rise for Health – Field)

R01 CA196853-01A1 (PI – Webster)

04/01/16-03/31/21

NIH/NCI

TIME-RESTRICTED FEEDING AND BREAST CANCER

Aim: The goal of this study is to test whether time-restricted feeding reduces inflammation, attenuates insulin resistance, and inhibits obesity-induced post-menopausal breast cancer growth.

Role: Co-Investigator

16SFRN28420000 (Center Director – Allison) 04/01/16-03/31/20 American Heart Association
UCSD STRATEGICALLY FOCUSED GO RED FOR WOMEN RESEARCH CENTER
Aim: Establish a Women’s Cardiovascular Health Research Center with investigative theme of sedentary behavior in Latinas focusing on behavioral and psychosocial parameters, behavioral intervention, and biological mechanisms influencing cardiovascular disease risk. The Center research involves three interdependent projects (basic, clinical, and population science studies) and includes a scholars Training Core.
Center website: <https://medschool.ucsd.edu/som/fmph/divisions/prevmed/research/wrc/Pages/default.aspx>
Press story: <https://www.universityofcalifornia.edu/news/new-uc-san-diego-center-will-focus-heart-health-among-latinas>
Clinical study protocol paper: [PMID: 30771560](https://pubmed.ncbi.nlm.nih.gov/30771560/)
Role: PI - Project 1 (Basic Science Project “Molecular Transducers of Sitting Time”) [First Project Paper](#)

No grant # yet (PI – Davies) 08/01/2019-07/31/2020 California Breast Cancer Research Program - IDEA
ENHANCING MUSCLE STRENGTH AND IMMUNITY IN BREAST CANCER
Aim: This 1-year pilot study will test the hypothesis that high levels of immune activation markers are associated with muscle strength in breast cancer patients.
Role: Site PI

Demonstration Project in Systems Biomedicine (PIs – **Sears**; Jankowska) 5/1/15-12/31/20
UCSD Center for Computational Biology and Bioinformatics and the San Diego Center for Systems Biology
NUCLEOTIDES TO NEIGHBORHOODS: OBESITY-RELATED ASSOCIATION NETWORKS SPANNING GENOMES, BEHAVIORS, AND BUILT ENVIRONMENT
Aim: Model interaction between the behaviors (e.g., physical activity, nutrition), environment exposure (e.g., “built” characteristics, fast food density, outdoor time), clinical measures and obesity-related biomarkers, host genome and gut microbiome using systems biomedicine approaches.
Role: PI

16SFRN28420002 (PI – Sharma; UCSD Site PI – **Sears**) 07/01/17 – 6/30/20 American Heart Assn
Go Red for Women Strategically Focused Research Network Soter Collaborative Grant
INTEGRATING METABOLOMICS INTO DEEP PHENOTYPING OF HEART FAILURE WITH PRESERVED EJECTION FRACTION
Aim: Metabolomic profiling of plasma, skeletal muscle and endomyocardial biopsies from HFpEF patients and control participants will be conducted and correlated with clinical features of HFpEF and covariates with the goal of identifying a biomarker for HFpEF patient diagnosis and targeted therapy.
Role: Site PI

R01 CA225746-01A (PI – Hartman) 02/01/19 – 01/31/24 NIH/NCI
“A Randomized Trial of Physical Activity for Cognitive Functioning in Breast Cancer Survivors”
Aim: Conduct a 2-arm RCT in 250 breast cancer survivors to test the effect of exercise to improve cognition and related circulating biomarkers over a 12-month intervention period.
Role: Co-Investigator

R01 CA228147-01A (PIs – Jankowska, Benmarhnia) 04/01/19 – 03/31/24 NIH/NCI
“Integrating novel GIS and GPS data to assess the impact of built environments on changes in BMI, physical activity and cancer-related biomarkers in two successful weight loss interventions in women at risk for breast cancer”
Aim: Evaluate impact of dynamic measures of built environment exposures on variable associated with weight loss and breast cancer risk reduction.
Role: Co-Investigator

R15 CA242394-01 (PI – Kroll) 07/01/19 – 06/30/20 NIH/NCI
“A combination therapy for interventional treatment of triple-negative breast cancer”

Aim: Exploit the potential vulnerability of glucose-requiring breast tumor growth with a combination of dietary and pharmaceutical manipulation of blood glucose levels in a murine breast cancer model.

Role: Consultant

Completed Research Support

PEDAL18 (PIs – **Sears**; Bejar)

03/01/19-2/29/20

San Diego NCI Cancer Centers Council (C3) Collaborative Translational Cancer Research Pilot Project
“Impact of Metformin on Clonal Hematopoiesis and Clinical Outcomes in Breast Cancer”

Aim: Using high-sensitivity error-corrected sequencing, characterize rates of clonal hematopoiesis in blood samples from a cohort of metformin-treated breast cancer survivors who have received adjuvant chemotherapy.

Role: PI

PEDAL15 (PIs – **Sears**; Patterson; Panda)

5/1/16-12/31/19

San Diego NCI Cancer Centers Council (C3) Collaborative Translational Cancer Research Pilot Project
MECHANISMS LINKING PROLONGED NIGHTLY FASTING WITH CANCER RISK

Aim: Compare associations of metabolic, inflammatory, and behavioral cancer risk factors in participants with “short” vs. “prolonged” nightly fasting patterns. Explore associations between the plasma metabolome and gut microbiome with nightly fasting patterns.

Role: PI

16SFRN28420001 (PI – Makarem; UCSD Site PI – **Sears**)

05/01/17 – 4/30/19

American Heart Assn

Go Red for Women Strategically Focused Research Network Soter Collaborative Grant

NIGHTLY FASTING AND EATING PATTERNS AND CARDIOMETABOLIC RISK IN
HISPANIC/LATINA WOMEN

Aim: Conduct a prospective observational study in Hispanic/Latina women of the relationship between length of nightly fasting duration and parameters of cardiometabolic risk including biomarkers, and sleep.

Role: Site PI

Pro1250 (PI – Stuart; UCSD Site PI – Rana)

1/1/14-12/31/17

NASA

METABOLOMIC AND GENOMIC MARKERS OF ATHEROSCLEROSIS AS RELATED TO OXIDATIVE
STRESS, INFLAMMATION, AND VASCULAR FUNCTION IN TWIN ASTRONAUTS

Aim: Astronauts participating in long-duration missions may be at an increased risk of oxidative stress and inflammatory damage. This proposal extends a current NASA-funded investigation to determine whether spaceflight contributes to an accelerated progression of atherosclerosis. We propose to measure blood and urine biomarkers of oxidative stress and inflammation as well as arterial structure and function in one twin astronaut before, during, and after long duration spaceflight and in his twin who serves as a ground-based control. We will also measure metabolomic and genomic markers to elucidate the molecular mechanisms involved. Our project is 1 of 10 in the [NASA Twins Study](#).

Role: Co-investigator

Publications: Primary manuscript [PMID: 30975860](#) (#61 above).

R01 CA179977-01 (PI – Kerr)

09/01/13 – 08/31/17

NIH/NCI

GPS EXPOSURE TO HEALTHY ENVIRONMENTS & RELATIONS WITH BIOMARKERS OF CANCER
RISK (aka, “Community of Mine”)

Aim: Investigate whether dynamic GPS-GIS measures of exposure to PA-supportive, high fat and sugar food, and social environments will have a stronger association with cancer risk factors – insulin resistance and inflammation (e.g. CRP, IL-6, HOMA-IR) – than do static GPS-GIS measures.

Role: Lead - Biomarker Data Collection & Analysis

Publications status: Protocol manuscript is published [PMID: 30760246](#) (#58 above). Data analyses are on-going. Anticipate main study outcomes manuscript submission in Fall 2019.

Internal pilot funding (PI – **Sears**)

01/01/16 – 12/31/16

Department of Family Medicine & Public Health, Women’s Health Center of Excellence

No grant# (PI – Knight)

09/01/17 – 08/31/22

IBM

“Artificial Intelligence for Healthy Aging and Microbiome”

Aim: Utilize Watson artificial intelligence and big data systems to conduct analyses on microbiome data generated from multiple sources and populations and develop a public-source platform for future analyses.

Role: Co-investigator

SEDENTARY BEHAVIOR INTERRUPTED - A PILOT STUDY OF ACUTE INTERVENTIONS ON PROLONGED SITTING

Aim: To investigate the clinical, metabolic, and vascular outcomes of acute interruptions of prolonged sitting in a clinical laboratory setting. Study population is overweight/obese postmenopausal women aged 55+ years.

ClinicalTrials.gov ID: NCT02743286, UCSD IRB Protocol ID: 150509

Role: PI

Project status: Main outcomes published in [PLOS ONE \(Kerr, et al. Nov 2017\)](#). Preliminary data leveraged to secure NIH funding above from National Institutes of Aging (P01 AG052352).

U54 CA155435-01

(PI - Patterson)

07/01/11 – 05/31/16

NIH/NCI

ENERGETICS & BREAST CANCER: OBESITY, INFLAMMATION, INSULIN RESISTANCE & RISK

Aim: The overall objective of the UCSD Transdisciplinary Research on Energetics & Cancer (TREC) Center is to assemble transdisciplinary scientific collaborators to address questions regarding insulin resistance and inflammation underlying the association of energetic with breast cancer carcinogenesis, from the cell to the community.

Roles: Director - Developmental Projects Core; Co-investigator - Project #1

Developmental Cross-TREC Project (PI – Sears,

06/01/15 - 05/31/16

NIH/NCI - TREC

LEVERAGING THE POWER OF TREC: CROSS-CENTER STUDY OF CANCER RECURRENCE/ MORTALITY RISK BIOMARKERS

Aim: The goal of this study is to measure baseline levels of cancer recurrence/mortality biomarkers in a pan-TREC multi-site pooled cohort of breast cancer survivors and assess randomized controlled trial intervention efficacies in reducing these biomarkers.

Role: PI

No grant #

(PI - Sears)

12/01/10 – 12/31/15

P. Robert Majumder Foundation

ROLE OF DIETARY FAT ON ADIPOSE TISSUE INFLAMMATION

Aim: Examine how the gene-diet interaction between 12/15-lipoxygenase expression in immune cells and dietary composition affects adipose tissue inflammation.

Role: PI

No grant #

(PI - Sears)

12/01/10 – 12/31/14

P. Robert Majumder Foundation

NOVEL DIETARY INTERVENTIONS FOR TREATING INSULIN RESISTANCE

Aim: Test the efficacy of an anti-inflammatory diet to lower indices of insulin resistance and the metabolic syndrome in obese human subjects.

Role: PI

Developmental Cross-TREC Project (Site PI – Sears)

06/01/13 - 05/31/14

NIH/NCI – TREC

TRANSGENERATIONAL EFFECT OF MATERNAL DIET ON METHYLATION OF CANCER RELATED GENES

Aim: Assess maternal diet effects on epigenetic DNA methylation of cancer-associated genes.

Role: PI

Developmental Cross-TREC Project (Lead PI – Sears)

06/01/13 - 05/31/14

NIH/NCI - TREC

LIPIDOMIC PROFILING OF ENERGETICS-ASSOCIATED CANCER MODELS IN MICE

Aim: Create and assess lipid profiles from three mouse models of energetics-related cancer and identify tumor-promoting lipid-based biomarkers and biochemical pathways regulated by energetics.

Role: PI

No grant # (PI - Olefsky) 04/01/13 – 03/31/14 Regulus
TRANSCRIPTOME PROFILES OF HUMAN ADIPOSE, MUSCLE, AND LIVER IN INSULIN
RESISTANCE

Aim: Determine a definitive expression atlas of liver, adipocytes, adipose tissue stromal vascular fraction, and skeletal muscle tissue associated with obesity, thiazolidinedione treatment, and bariatric surgery. Association of these expression profiles with biomarkers of insulin resistance and inflammation will be assessed. Advanced pathway and expression module analysis will be conducted.

Role: Co-investigator/Clinical Project Manager

BC102147 (PI - Olefsky) 03/15/11-03/14/13 DOD
ROLE OF INFLAMMATION AND INSULIN RESISTANCE IN MOUSE MODELS OF BREAST CANCER

Aim: Investigate the mechanism by which insulin resistance increases risk of breast cancer in mouse genetic models of obesity.

Role: Co-investigator

5R01DK074828 (PI - Snitker) 04/01/11 – 03/31/12 NIH/NIDDK
PHARMACOGENOMICS OF THIAZOLIDINEDIONE RESPONSE

Aim: Search for genomic polymorphisms that are associated with insulin sensitization response to thiazolidinedione drugs in human subjects.

Role: Consortium PI

UCSD Internal Support (PI - Sears) 05/01/10 – 4/30/11 UCSD Academic Senate
REGULATION OF BRANCHED CHAIN AMINO ACID DEGRADATION IN ADIPOCYTES

Aim: Study the mechanisms by which adipocyte branched chain amino acid degradation is regulated in the normal state, insulin resistance, and pharmacological insulin sensitization.

Role: PI

R01 HL81862-04 and S1 (PI - Miller) 04/01/2006 - 03/31/2011 NIH
EARLY FORMS OF OXIDIZED LDL, TLRs AND ATHEROSCLEROSIS

Aim: Examine the hypothesis that early forms of oxidized LDL promote inflammation in atherosclerotic lesions via modulation of Toll-like receptor-4 signaling.

Role: Co-investigator

UCSD# 2009-3206 (PI - Olefsky) 04/01/09 – 03/31/11 Pfizer
INFLAMMATION, INSULIN RESISTANCE & DIABETES

Aim: Explore the interlocking biology between pro-inflammatory and anti-inflammatory nuclear and 7-transmembrane receptors and identify novel biologic targets uniquely expressed within the specialized population of pro-inflammatory tissue macrophages.

Role: Co-investigator

UCSD# 2009-2029R (PI - Sears) 07/31/09 – 07/30/10 Merck
VALIDATING MOUSE-DERIVED PPAR γ SUB-NETWORKS WITH HUMAN ADIPOSE
EXPRESSION PROFILING DATA

Aim: Identify key metabolic mechanisms involved in regulating insulin resistance by comparing expression profiling data sets from mouse and human models.

Role: PI

P30 DK063491 (PI - Sears) 04/01/09 – 03/31/10 NIH via the UCSD/UCLA
OSTEOPONTIN – A NOVEL MODULATOR OF INFLAMMATION-INDUCED
INSULIN RESISTANCE IN ADIPOSE TISSUE Diabetes &
Endocrinology

Aim: Study the mechanisms by which osteopontin-deficiency protects against diet-induced insulin resistance and adipose tissue inflammation.

Research Center

Role: PI

UCSD# bio03-10383 (PIs – **Sears** & Olefsky) 01/21/04-01/20/06 Pfizer Biostar & UC
STUDIES OF SELECTIVE PPAR γ MODULATOR BIOLOGY Discovery
Aim: Conduct gene expression profiling of human tissues to identify gene expression patterns that are associated with insulin resistance, type 2 diabetes, and pharmacological insulin sensitization.

Role: PI

UCSD# 2005-1103 (PI - **Sears**) 12/01/03 - 02/14/06 Pfizer
GLUCOSE CLAMP MODEL OF TEST AGENT
Aim: Conduct gene expression profiling of different tissues from an insulin resistant rat model to identify gene expression patterns that are associated with insulin resistance and pharmacological insulin sensitization.

Role: PI

UCSD Internal Support (PI - **Sears**) 01/01/05 – 12/31/05 UCSD Academic Senate
THE ROLE OF PPAR γ GENES IN INSULIN ACTION
Aim: Screen for genes that are candidate modulators of insulin sensitivity. Using siRNA methods, the roles of these genes insulin-stimulated glucose transport will be characterized.

Role: PI

K01 DK62025-01 (PI – **Sears/Worrall**) 09/15/02 – 06/30/05 NIH/NIDDK
IDENTIFICATION AND STUDY OF PPARGAMMA-REGULATED GENES
Aim: Identify PPARgamma-regulated genes in 3T3-L1 adipocytes and characterization of the mechanisms that modulate pharmacological regulation of PPARgamma target genes.

Role: PI

F32 DK009595 (PI – **Sears**) 07/01/97 – 06/30/00 NIH/NIDDK
NOVEL INSULIN SIGNAL TRANSDUCTION PROTEINS
Aim: Identify and characterize new factors that are involved in insulin-mediated signal transduction by using protein-protein interaction studies.

Role: PI